Raw file conversion and editing.

Understanding and being able to manipulate a RAW file will make you a better photographer. PERIOD.

First, you'll want to acquaint yourself with what exactly a Camera Raw image is.

This page does a good job of explaining what the difference is between the two. It gets pretty wordy, but take your time to read through it.

This is a much simpler explanation... **READ IT!**

Essentially a .RAW file is a film negative compared to a .JPG, which is a photographic print. You have a lot more leeway to modify a .RAW file vs. the .JPG

You'll know you are working with a raw image depending on what the file extension is. Canon cameras shoot a .CR2 file, while Nikon's shoot a .NEF file.



You set what type of file you're going to record on your camera before shooting. You can choose .raw, .jpg, or both.

Adobe Camera Raw

Adobe Camera Raw (ACR) is a .raw "decoder" that is included with Photoshop and Photoshop Elements. It has the information needed to read the different Raw files produced by various camera manufacturers. When you open a .raw file in Photoshop, it has to go through this "decoder" before it can be opened in Photoshop proper.

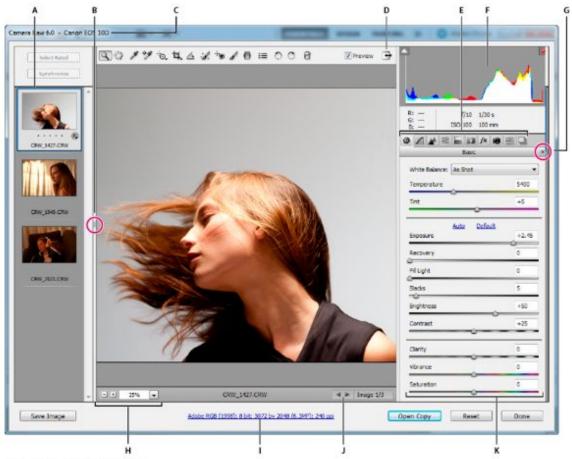
Note: If you have a .NEF file from a newer camera, it may not work with a very old version of Photoshop!

Think of Adobe Camera Raw as the security check at an airport before boarding a plane (With a .jpg image, you just head straight onto the airplane.)

Each camera usually includes software with which you can edit and view the raw files as well. This replaces Adobe Camera Raw, but it is often more convenient to just use Adobe Camera Raw because it is linked to Photoshop..

This is what it looks like, but remember that different versions of ACR will look different:

Camera Raw dialog box overview



Camera Raw dialog box

A. Filmstrip B. Toggle Filmstrip C. Camera name or file format D. Toggle full-screen mode E. Image adjustment tabs F. Histogram G. Camera Raw Settings menu H. Zoom levels I. Workflow options J. Navigation arrows K. Adjustment sliders

Of most importance above, are letters F,G, and K.

G is the Camera Raw settings menu. At this point, I would just leave it at "Basic"

F is the Histogram, or bar graph that shows how much or little each subpixel (red, green or blue) has been shaded. You'll want to try and avoid having peaks at either end of this bar graph. You can change the shape of this Histogram by altering the sliders found below in

K These adjustment sliders allow you to almost go "back in time" to adjust what a photo will look like in the present. Was your white balance set wrong? No problem, just adjust the "Temperature" slider.

So why shoot camera RAW files?

Did you forget to check your light meter? No worries! Just adjust your "Exposure slider".

These are the most important sliders, but the other ones play an important role as well. They really finetune the look of your image. It is easier to experiment with them than to explain what they do in depth. Needless to say, the "Shadows" slider allows you to alter subpixels near the darker end of the bar graph, without affecting the near pure colour ones, and vice versa with the "Fill lights" and "Recovery" sliders.

Once you have finished, you will hit the "Open Copy" button and proceed to work on the image in regular Photoshop as you would with a .jpg. (Although you can do some similar modifications in ACR as in Photoshop.)

Alternately, you can elect to hit the "Save Image" button, which will **not** open the image in Photoshop.

The Project

For this project, you will be doing two things:

First, you'll be opening these three .NEF raw files and working on them in ACR before opening them in Photoshop. You can find them here.



Open these files in Adobe Camera Raw by either dragging them over the Elements icon, or by selecting "File" "Open".

- Work on the White balance, exposure, and recovery by moving the sliders.
- Play with all the sliders before opening in Photoshop to rotate and crop the images.

You will save these files to your folder as .jpg's to incorporate into a PDF document.

Please "File" ---> "Save As" "ConvertedRAW1.jpg, ConvertedRAW2.jpg, and ConvertedRAW3.jpg

Note: Make sure you use the "format" pulldown to save as a jpeg, do NOT erase .nef and add .jpg!



Secondly, you'll be altering the similarly named jpegs files and trying to get them to look as good as possible (or at least similar to the .NEF files.) You can play with the levels tool (command +L) and rotate and crop them before saving.

■ JPEG1.JPG	4.91MB	Nov 05 2015
■ JPEG2.JPG	4.72MB	Nov 05 2015
₱ JPEG3.JPG	4.32MB	Nov 05 2015

[&]quot;File"-> "Save as" these as "ConvertedJPG1.jpg", "ConvertedJPG2.jpg", and

All 6 of these image files should be put into a folder.

You will use them to complete a compare and contrast PDF.

The final .pdf document you will be handing in will show both the photoshopped RAW and Jpeg image.

With each set of images, please compare and contrast each photo.

Read This!!!!

How to rotate and crop

I'd like you to rotate your pictures until they have a level horizon line.

Likewise, I'd like you to crop your photos to 3.5" x5" and make sure the resolution is 300ppi If you've forgotten how to do this (or never knew how) please watch this excellent video

[&]quot;ConvertedJPG3.jpg" in the same place you saved your Converted Raw files.